

Claims

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1. A method of transmitting a video image including an object of interest comprising capturing a sequence of images in which the object of interest occupies a fraction of each image, tracking the object of interest by selecting and extracting a region of each image including the object of interest, and coding only the selected region of each captured image.
2. A method as claimed in claim 1 comprising stabilising the object of interest within the extracted region.
3. A method as claimed in claim 2 wherein the extracted region is selected so that the object of interest is centred within the extracted region.
4. A method as claimed in any one of claims 1 to 3 comprising transmitting the coded region, and decoding and displaying the selected region.
5. A method as claimed in claim 4 wherein the extracted region is displayed in a format comprising fewer pixels than the format of the captured image.

6. A method as claimed in any one of claims 1 to 5 in which the object of interest occupies less than a predetermined fraction of each image.

7. A method as claimed in any one of claims 1 to 5 in which the object of interest occupies a small fraction of each image.

8. A method of processing a video image including an object of interest comprising selecting a region of an image including the object of interest, the selected region being of a predetermined size, and coding the selected region.

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9. A method as claimed in claim 8 wherein only the selected region is coded and the rest of the captured image is discarded.

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10. A method as claimed in claim 8 or claim 9 wherein the selected region corresponds to a predetermined image format having fewer pixels than the format of the image capture of the camera.

11. A method as claimed in claim 10 wherein the captured image is in CIF format and the selected region is in QCIF format.

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12. A method as claimed in any one of claims 8 to 11 wherein the selected region is scaled to compensate for movements of the object of interest backwards and forwards relative to the camera.

5 13. A method as claimed in any of claims 8 to 12 wherein the object of interest is stabilised within the selected region.

14. A method as claimed in claim 13 wherein the selected region is such so that the object of interest is centred in the selected region.

10 15. A method of processing a video image including an object of interest comprising selecting a region of the image including the object of interest and which is greater than the area occupied by the object of interest by a predetermined degree, and coding said region.

15 16. A method as claimed in claim 15 wherein the object of interest occupies a predetermined percentage of the selected region.

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20 17. A method as claimed in claim 15 or claim 16 comprising scaling the selected region to a predetermined size.

18. A method as claimed in claim 17 wherein the predetermined size corresponds to a known format.

5 19. A method as claimed in claim 18 wherein the captured image is in CIF format and the extracted region is scaled to QCIF format.

10 20. A method of transmitting video images comprising processing video images according to a method as claimed in any one of claims 1 to 19, transmitting the encoded image data, and receiving, decoding and displaying the image data.

15 21. A method of operating a video camera comprising arranging the camera so that an object of interest occupies a fraction of the area of the captured image, tracking movement of the object of interest within the captured image, selecting and extracting a region of interest around the object of interest and displaying only the extracted part of the captured image.

20 22. An image processing circuit comprising means for extracting a region of each image including an object of interest and coding only the selected region of each captured image.

23. An image processing circuit comprising means for selecting a region of an image including an object of interest, the selected region being of a predetermined size, and coding the selected region.

5 24. An image processing circuit comprising means for selecting a region of the image such that the object of interest occupies a predetermined percentage of the region, and for coding said region.

10 25. A video image processing circuit comprising means for performing a method as claimed in any one of claims 1 to 21.

26. A video image processing device comprising a camera and a circuit as claimed in any one of claims 21 to 25.

15 27. A mobile phone comprising a circuit as claimed in any one of claims 21 to 25 or a device as claimed in claim 26.

28. Apparatus for processing video images substantially as hereinbefore described as an embodiment with reference to the respective accompanying drawings.

29. A method of processing video images substantially as hereinbefore described as an embodiment with reference to the respective accompanying drawings.

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